## Message

From: Allenbach, Becky [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=FD8D7185973C44268441863F02A769D1-ALLENBACH, BECKY)

**Sent**: 11/27/2017 8:44:22 PM

To: Hall, Renea [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=7e6fa15b05c0453da3cae5dacdb93574-Hall, Renea]

Subject: RE: [External] RE: Increase value - FW: Chemours Outfall 002 Results

## Ok thanks!

Becky B. Allenbach, Chief Grants and Drinking Water Protection Branch Water Protection Division EPA Region 4 – Atlanta Office: 404-562-9687 Cell: 678-641-0032

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From: Hall, Renea

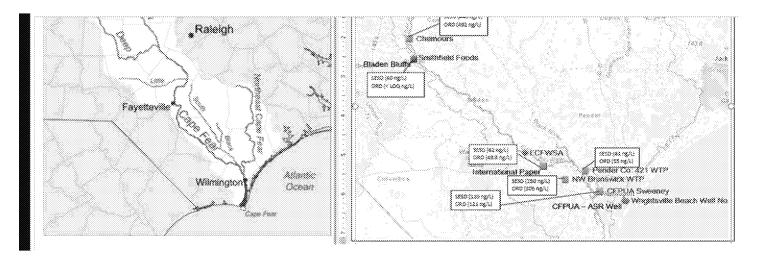
**Sent:** Monday, November 27, 2017 3:43 PM **To:** Allenbach, Becky <Allenbach.Becky@epa.gov>

Subject: RE: [External] RE: Increase value - FW: Chemours Outfall 002 Results

On the picture, it seems like the HFPO-DA gradually decreases (62  $\rightarrow$  41) just before the confluence of the Black and Northeast Cape Fear River with the Cape Fear River...

I want to work with the GIS group to learn a little more about where the Brunswick intake is positioned relative to the Cape Fear River, since it seems to be a touch more inland. I'll look into this in the morning.

Also, looking into Brunswick's treatment...



From: Allenbach, Becky

**Sent:** Monday, November 27, 2017 3:36 PM **To:** Hall, Renea < <u>Hall.Renea@epa.gov</u>>

Subject: RE: [External] RE: Increase value - FW: Chemours Outfall 002 Results

Confluence of which river?

Becky B. Allenbach, Chief Grants and Drinking Water Protection Branch Water Protection Division EPA Region 4 – Atlanta Office: 404-562-9687 Cell: 678-641-0032

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From: Hall, Renea

**Sent:** Monday, November 27, 2017 3:24 PM **To:** Allenbach, Becky < <u>Allenbach.Becky@epa.gov</u>>

Subject: FW: [External] RE: Increase value - FW: Chemours Outfall 002 Results

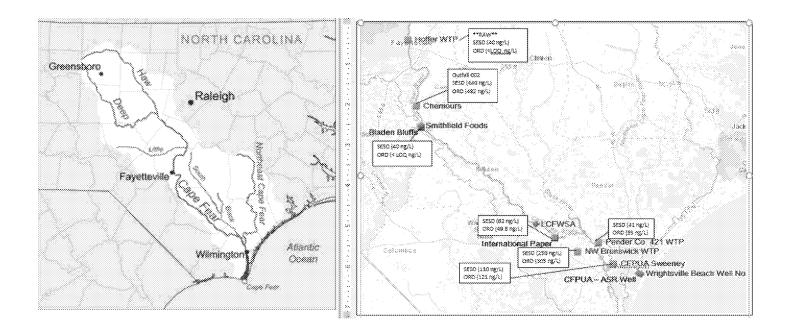
Becky,

All of the systems downstream are Surface Water systems. This includes CFPUA, IP, Pender, Bladen Bluffs and Brunswick.

The only RAW sample is upstream of Chemours, Hoffer WWTP.

It seems like there's a spike after the confluence; therefore, I'm looking into:

- 1. Possible sources along the South, Northeast Cape Fear River and Black River tributaries
- 2. Treatment near IP and Pender.



From: Walker, Mary

Sent: Monday, November 27, 2017 10:38 AM

To: Allenbach, Becky <Allenbach.Becky@epa.gov>; Campbell-Dunbar, Shawneille <Campbell-

<u>Dunbar.Shawneille@epa.gov</u>>; Hall, Renea <<u>Hall.Renea@epa.gov</u>>; Davis, Molly <<u>Davis.Molly@epa.gov</u>>; Janovitz, Sara

<<u>Janovitz.Sara@epa.gov</u>>

Subject: RE: [External] RE: Increase value - FW: Chemours Outfall 002 Results

**Enforcement Confidential** 

Becky and all,

Please take a look at these results and the distribution of the values on the map. They don't make a lot of sense to me. IP and Pender Co – both between Outfall 002 and Brunswick – are at 62 and 41 ng/l – but Brunswick at 250 and CFPUA Sweeney (downstream) is at 110. I hope the two elevated ones are not elevated due to something going on in the treatment system as a result of previous intake of contaminated water. Wonder if IP and Pender are raw and Brunswick and Sweeney are only two finished. Can you look into and help me understand this?

Also, I am assuming that the CFPUA data is for Sweeney and that it's finished water (rather than the ASR well). Can you confirm this?

Thanks, Mary

From: Allenbach, Becky

**Sent:** Wednesday, November 22, 2017 10:11 AM **To:** Walker, Mary < walker.mary@epa.gov >

Subject: FW: [External] RE: Increase value - FW: Chemours Outfall 002 Results

From North Carolina who is doing sample collection

Becky B. Allenbach, Chief Grants and Drinking Water Protection Branch Water Protection Division EPA Region 4 – Atlanta Office: 404-562-9687

Cell: 678-641-0032

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From: Johnson, Chris [mailto:chris.johnson@ncdenr.gov]

**Sent:** Wednesday, November 22, 2017 9:53 AM **To:** Allenbach, Becky < <u>Allenbach, Becky@epa.gov</u>>

**Cc:** Cox, Heidi < heidi.cox@ncdenr.gov>; Allen, Trent < trent.allen@ncdenr.gov>; Overby, Tommy D < tommy.overby@ncdenr.gov>; Brantley, Mark < mark.brantley@ncdenr.gov>; Culpepper, Linda

<linda.culpepper@ncdenr.gov>

Subject: RE: [External] RE: Increase value - FW: Chemours Outfall 002 Results

Becky, please see Heidi's response to your question below.

Chris Johnson NC DEQ-DWR Water Sciences Section 919-733-3908

Correspondence with this email address is subject to North Carolina public record regulations and may be disclosed to third parties.

From: Cox, Heidi

Sent: Wednesday, November 22, 2017 9:41 AM

To: Johnson, Chris < <a href="mailto:chris.johnson@ncdenr.gov">chris.johnson@ncdenr.gov</a>; Allen, Trent < <a href="mailto:trent.allen@ncdenr.gov">trent.allen@ncdenr.gov</a>; Overby, Tommy D

<tommy.overby@ncdenr.gov>; Brantley, Mark <mark.brantley@ncdenr.gov> Subject: Re: [External] RE: Increase value - FW: Chemours Outfall 002 Results

The samples we are collecting from the water plants are finished water samples. Some of the water systems are collecting their own samples and some may be raw and others are finished water but we have been directed to collect finished water.

Heidi Lane Cox
Regional Engineering Supervisor
Wilmington and Fayetteville Regional Offices
Public Water Supply Section
Department of Environmental Quality
(910) 796-7368 office
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Heidi.cox@ncdenr.gov
127 Cardinal Drive Ext.

Wilmington, NC 28405

Email correspondence to and from this address is subject to the North Carolina Public Records Law and may be disclosed to third parties.

ED\_002096A\_00003769-00004

From: Johnson, Chris

Sent: Wednesday, November 22, 2017 9:30:42 AM

To: Allen, Trent; Cox, Heidi; Overby, Tommy D; Brantley, Mark

Subject: FW: [External] RE: Increase value - FW: Chemours Outfall 002 Results

Could one of you respond to Becky Allenbach about her question. I was about to tell her they are finished water, but wanted to confirm since you all actually pulled them. Thanks.

Chris Johnson NC DEQ-DWR Water Sciences Section 919-733-3908

Correspondence with this email address is subject to North Carolina public record regulations and may be disclosed to third parties.

From: Allenbach, Becky [mailto:Allenbach.Becky@epa.gov]

Sent: Wednesday, November 22, 2017 9:18 AM

To: France, Danny < France. Danny@epa.gov >; Burdette, Diana < Burdette. Diana@epa.gov >; Sivertsen, Scott

<Sivertsen.Scott@epa.gov>

Cc: Johnson, Chris < chris.johnson@ncdenr.gov >; Walker, Mary < walker.mary@epa.gov >

Subject: [External] RE: Increase value - FW: Chemours Outfall 002 Results

Importance: High

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## Danny and others:

For the drinking water facilities, do we know if these results are from raw or finished water?

Becky

Becky B. Allenbach, Chief Grants and Drinking Water Protection Branch Water Protection Division EPA Region 4 – Atlanta Office: 404-562-9687 Cell: 678-641-0032

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From: France, Danny

Sent: Tuesday, November 21, 2017 5:01 PM

**To:** Culpepper, Linda < linda.culpepper@ncdenr.gov>; Allenbach, Becky < Allenbach.Becky@epa.gov>; Kemker, Carol < Kemker.Carol@epa.gov>; Mitchell, Ken < Mitchell.Ken@epa.gov>; Banister, Beverly < Banister.Beverly@epa.gov>

Subject: RE: Increase value - FW: Chemours Outfall 002 Results

The data for the first set of Chemours samples (16-19<sup>th</sup>) has been completed this afternoon and will be reported out tonight and emailed to you.

Danny

From: Culpepper, Linda [mailto:linda.culpepper@ncdenr.gov]

Sent: Tuesday, November 21, 2017 2:22 PM

To: France, Danny < France. Danny@epa.gov >; Allenbach, Becky < Allenbach. Becky@epa.gov >; Kemker, Carol < Kemker. Carol@epa.gov >; Mitchell, Ken < Mitchell. Ken@epa.gov >; Banister, Beverly < Banister. Beverly@epa.gov >

**Subject:** Increase value - FW: Chemours Outfall 002 Results

We're on a Conf call with Chemours on the below data. Causes are said to believed to be due to rain causing runoff in the stormwater including spill residue from Oct 6th and/or start back of the plant. The IXM production area was in operation: spray coating, hydrologist and extrusions. Chemours is evaluating their stormwater measures.

Danny - it would be helpful for us to have the lab data to compare with their timeframes. Know you were targeting to send the week of Oct 16th this week.

Thank you for your help. Linda

Sent from my iPhone

Begin forwarded message:

Resent-From: <SRS0=/LRL=CT=apks.com=eric.rey@securence.com>

From: "Rey, Eric A." < <a href="mailto:Eric.Rey@apks.com">Eric.Rey@apks.com</a> Date: November 21, 2017 at 1:52:36 PM EST

To: "Lane, Bill F" <Bill.Lane@ncdenr.gov>, "sheila.holman@ncdenr.gov" <sheila.holman@ncdenr.gov>,

"Culpepper, Linda" < linda.culpepper@ncdenr.gov >, "Spiller, Asher" < Aspiller@ncdoj.gov >

Cc: "Gross, Joel M." < Joel.Gross@apks.com>, "Ralph Levene (rmlevene@wlrk.com)"

<rmlevene@wlrk.com>, "Compton, Christel E" < CHRISTEL.E.COMPTON@chemours.com>

Subject: [External] FW: Chemours Outfall 002 Results

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Resending as I mistyped (and received a bounce-back on) Sheila's email address:

Bill, Linda, Sheila, and Asher,

For discussion on our 2pm call today, please find below recent 3-day composite results for Outfall 002 (Table 1), as well as data correlating rain events with increases in concentration observed in recent results (Table 2). As you will see below, contributors to the 10/30/17 result may have been (1) a decrease in flow rate during the turnaround; and (2) a rain event. Chemours cannot rule out at this time that there may have been other contributing factors, including residual from the October 6<sup>th</sup> incident. Chemours continues to sample for C3 Dimer Acid near Outfall 002 and will share future results as they become available.

## Table 1: Most Recently Available Outfall 002 Results

<u>Day</u>	Concentration of C3 Dimer Acid near Outfall 002	Est. Flow Rate at Outfall 002 (million gallons per day (MGD))*	Est. Concentration under "Normal Flow" Conditions**
10/30/17 Composite (10/27 20:42 – 10/30 14:20)	2,400 ppt	6.096 MGD	654 ppt
11/2/17 Composite (10/30 14:20 – 11/2 13:30)	290 ppt	11.534 MGD	150 ppt

<sup>\*</sup> Average of the flow rate measured for a 24-hour period starting at 8:30am. For example, the flow rate for the 10/30/17 composite is based on dividing by 3 the sum of: (1) 50% of the flow measured for the 24-hour period starting on 10/27; (2) 100% of the flow measured for the 24-hour period starting on 10/28; (3) 100% of the flow measured for the 24-hour period starting on 10/29; and (4) 50% of the flow measured for the 24-hour period starting on 10/30.

Table 2: Rain Events and Recent Outfall 002 Results***				
Day	Concentration of C3 Dimer Acid near Outfall 002	Est. Flow Rate at Outfall 002 (million gallons per day (MGD))*	Rain Event (inches)****	
11/2/17 Composite (10/30 – 11/2)	290 ppt	11.534 MGD	0	
10/30/17 Composite (10/28 – 10/30)	2,400 ppt	6.096 MGD	0.76 inches (10/28 - 10/29)	
10/9/17 Composite (10/5 – 10/9)	3,700 ppt	22.116 MGD	3.08 inches (10/7 – 10/9)	
9/13/17 Grab	88 ppt	24.545 MGD	0	
9/12/17 Grab	420 ppt	22.242 MGD	0.96 inches	
9/11/17 Grab	67 ppt	21.767 MGD	0.05 inches	
9/7/17 Grab	140 ppt	23.876 MGD	0.01 inches	
9/6/17 Grab	250 ppt	25.004 MGD	0.61 inches	
9/5/17 Grab	70 ppt	24.773 MGD	0	

<sup>\*\*\*</sup> These data are a subset of the concentration data already provided to DEQ and are illustrative of the correlation recently observed between rain events and spikes in concentrations.

<sup>\*\*</sup> Assumes (1) "Normal Flow" is 22.357 MGD, which is the average daily flow amount for 20 days in September; and (2) the additional flow necessary to achieve "Normal Flow" contributes zero C3 Dimer Acid.

<sup>\*\*\*\*</sup> Rain data collected from the USGS data on the William O. Husk Lock and Dam located on the Cape Fear River and in close proximity to the Fayetteville Works. *See* https://waterdata.usgs.gov/nwis/uv?site\_no=02105500.

Eric A. Rey Associate

Arnold & Porter Kaye Scholer LLP 601 Massachusetts Ave., NW | Washington | DC 20001-3743 T: +1 202.942.5285 | M: +1 313.530.0740 | F: +1 202.942.5999 eric.rey@apks.com | www.apks.com

Original Message
From: Lane, Bill F [mailto:Bill.Lane@ncdenr.gov]
Sent: Tuesday, November 21, 2017 11:59 AM
To: Gross, Joel M.
Cc: Ralph Levene (RMLevene@wlrk.com); Culpepper, Linda; Rey, Eric A.; Compton, Christel E
Subject: Re: [External] 866 802 1366, code 48512367
Thank you Joel.
Bill Lane
General Counsel
N.C. Department of Environmental Quality
919-707-8616
> On Nov 21, 2017, at 11:21 AM, Gross, Joel M. <joel.gross@apks.com> wrote:</joel.gross@apks.com>
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